

April 18, 1994

Dear Colleague:

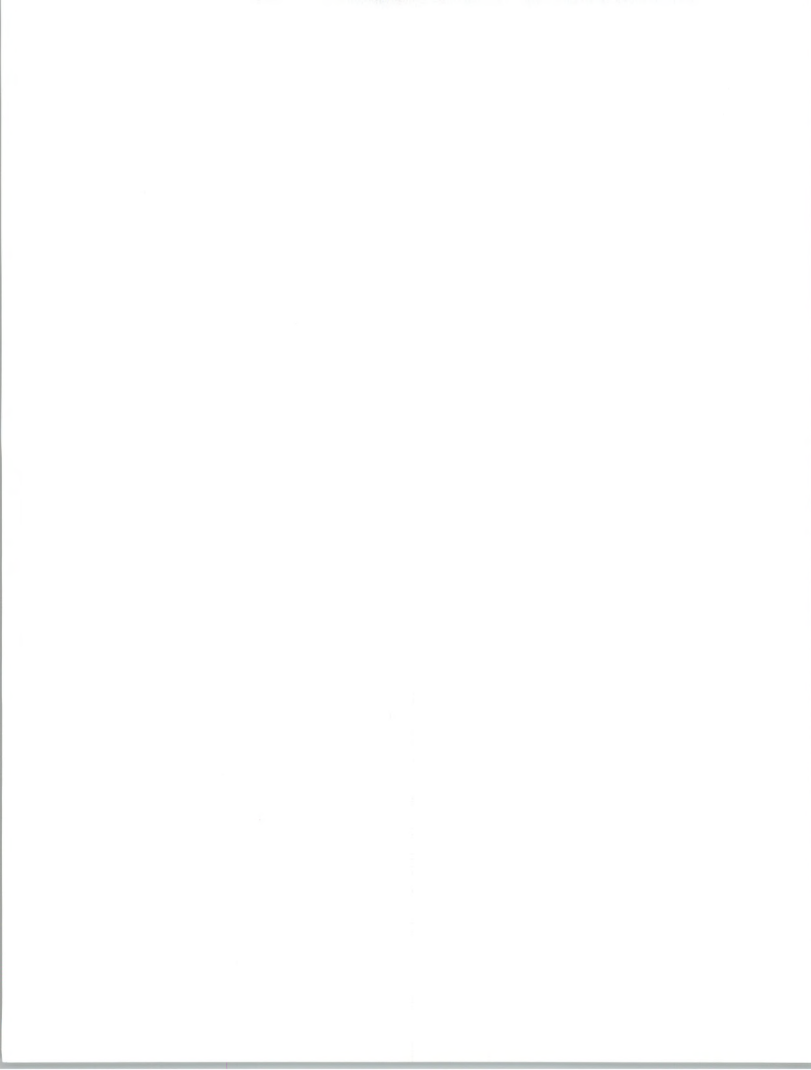
Enclosed is the Market Analysis Program Introduction for 1994. This guide replaces the 1993 Program Introduction Book located in Volume I of your MAP binder, behind the "Executive Overview" tab.

There are several significant changes in the 1994 program I wanted to highlight for you.

- We will resume the practice of publishing quarterly strategic perspective reports on topics of general interest. The topics initially chosen are:
 - Software Product/Support Strategies (now in process)
 - Wireless Communications (now in process)
 - Multimedia Business Applications
 - Middleware Markets

These last two reports will be produced later this year, and topics are subject to change. If you have suggestions, we would be pleased to receive them.

- Twenty-four research bulletins will be published this year (six have been shipped so far).
- Shipments of the product/service market forecasts (we previously referred to these as "delivery modes", a term we would like to phase out) will begin in April and be spaced at regular intervals throughout the year.
- The market forecast reports for Systems Integration/Professional Services and Outsourcing are no longer contained within MAP, but are available within INPUT's Business Integration and Outsourcing Programs, respectively. The complete, detailed U.S. Information Services forecasts in each of these markets will be included in the 1994-1999 MAP Forecast Compendium, along with all other product/service



market, vertical industry sector and cross-industry sector forecasts. We will publish the complete Forecast Compendium during the third quarter of 1994 that will provide you with the earliest complete forecast, ever, from MAP.

- Vertical industry and cross-industry market reports will also be shipped on a regular monthly basis, continuing throughout the year. We have completed our research work on Retail Trade, Business Services, Discrete Manufacturing and Education sectors and these reports will be available in May. Research is now underway in Process Manufacturing, Banking and Finance, Transportation and Wholesale Trade.
- Our annual client conference is scheduled for September 22-23, 1994 at the Westfield's Resort in Chantilly, VA. We felt this location would be convenient to East Coast clients who do not wish to travel to California for the fourth year in a row.

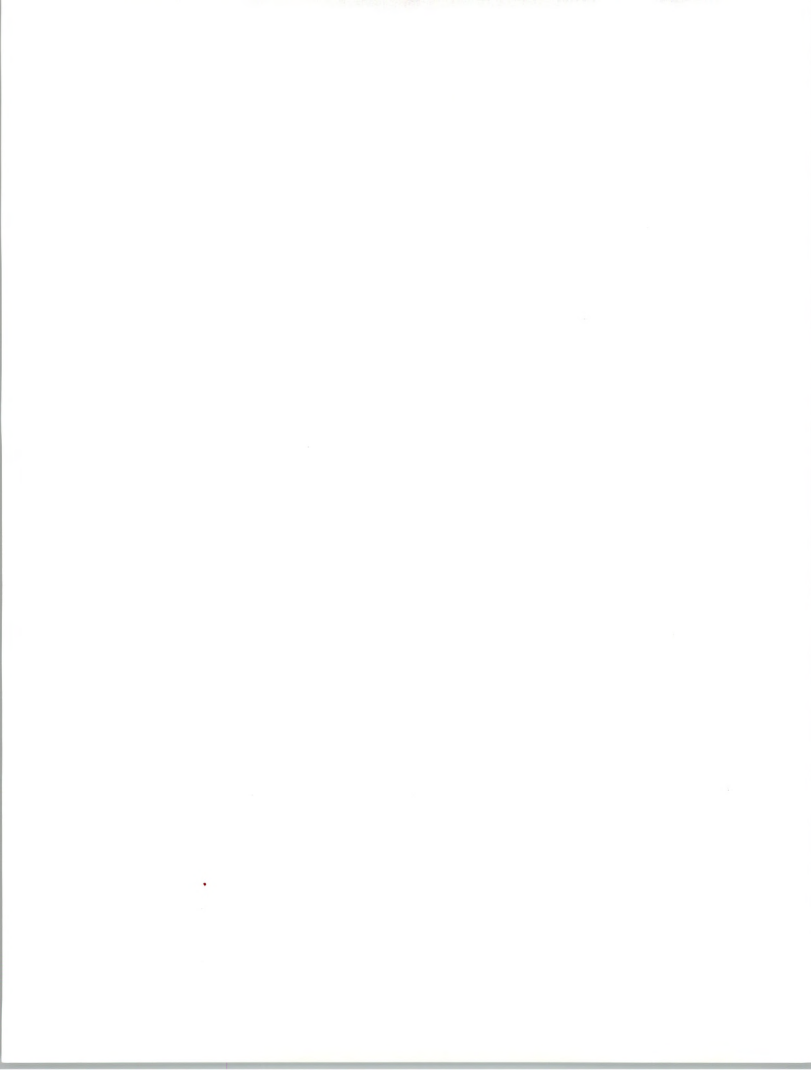
Finally, I want to point out that our most satisfied clients are generally those who are able to actively benefit from regular telephone access to the MAP Consultants. John McGilvray, Mary Raymond, Dan Ryan and I look forward to answering your inquiries.

I hope to visit each of you personally at least once this year, and want to hear from you whenever you have questions, issues or problems to discuss.

Sincerely,

A handwritten signature in cursive script, appearing to read "Bob Goodwin".

Robert L. Goodwin
Vice President





PROGRAM INTRODUCTION 1994

**U.S. Information Services
Market Analysis Program**



M A R C H 1 9 9 4

Program Introduction 1994

INPUT®

San Francisco • New York • Washington, D.C. • London • Paris • Frankfurt • Tokyo



Published by
INPUT
1881 Landings Drive
Mountain View, CA 94043-0848
U.S.A.

**U.S. Information Services
Market Analysis Program**

***Market Analysis Program—
Program Introduction, 1994***

Copyright © 1994 by INPUT. All rights reserved. Printed in the United States of America. No part of this publication may be reproduced or distributed in any form, or by any means, or stored in a database or retrieval system, without the prior written permission of the publisher.

The information provided in this report shall be used only by the employees of and within the current corporate structure of INPUT's clients, and will not be disclosed to any other organization or person including parent, subsidiary or affiliated organization without prior written consent of INPUT.

INPUT exercises its best efforts in preparation of the information provided in this report and believes the information contained herein to be accurate. However, INPUT shall have no liability for any loss or expense that may result from incompleteness or inaccuracy of the information provided.



Table of Contents

Program Introduction	1
A. Purpose and Scope	1
B. Program Content	5
1. Deliverables	5
2. Report Structure Format	6
3. Schedule	9
C. Research Methodology	10
1. Base-Year Expenditure Calculations	10
2. Market Forecasts	10
D. Vendor Revenue and User Expenditure Conversion	12
E. Economic Assumptions	14



Exhibits

-1	Information Services Industry Structure—1994	3
-2	Information Services Industry Market Sectors	4
-3	Market Report Format Product/Service Markets	7
-4	1994 Industry Sector Report	8
-5	Cross-Industry Markets	9
-6	Market Analysis Program Delivery Schedule, 1994	9
-7	INPUT Research Methodology	11
-8	Vendor Revenue to User Expenditure Conversion	13
-9	GDP and Inflation Growth Rate Assumptions, 1994-2000	14



Program Introduction

A

Purpose and Scope

The purpose of the Market Analysis Program (MAP) is to provide insight into, and understanding of, key issues, trends, opportunities and driving forces shaping the U.S. information services industry. Leading vendors, market shares and five-year forecasts are provided.

The information services industry is analyzed through segmentation of the industry into eight product/service markets:

- Professional Services*
- Systems Integration*
- Outsourcing*
(Systems Operations)
- Processing Services
- Network Services
- Systems Software Products
- Applications Software Products
- Turnkey Systems

* Detailed annual reports are contained in the business integration or outsourcing programs.

In addition, the industry is segmented into 15 industry sectors and seven cross-industry applications areas. The industry segmentation is based on the U.S. Department of Commerce's SIC Codes.

Each of the industry-specific (vertical) markets is analyzed, and the events, issues and trends in that market are described. In addition, a discussion of information systems department trends is offered to capture the specific buying patterns and motivations of each market. Cross-industry markets are analyzed in a similar fashion.

Exhibit 1 shows the information services industry structure by product/service market and subsector for 1994.

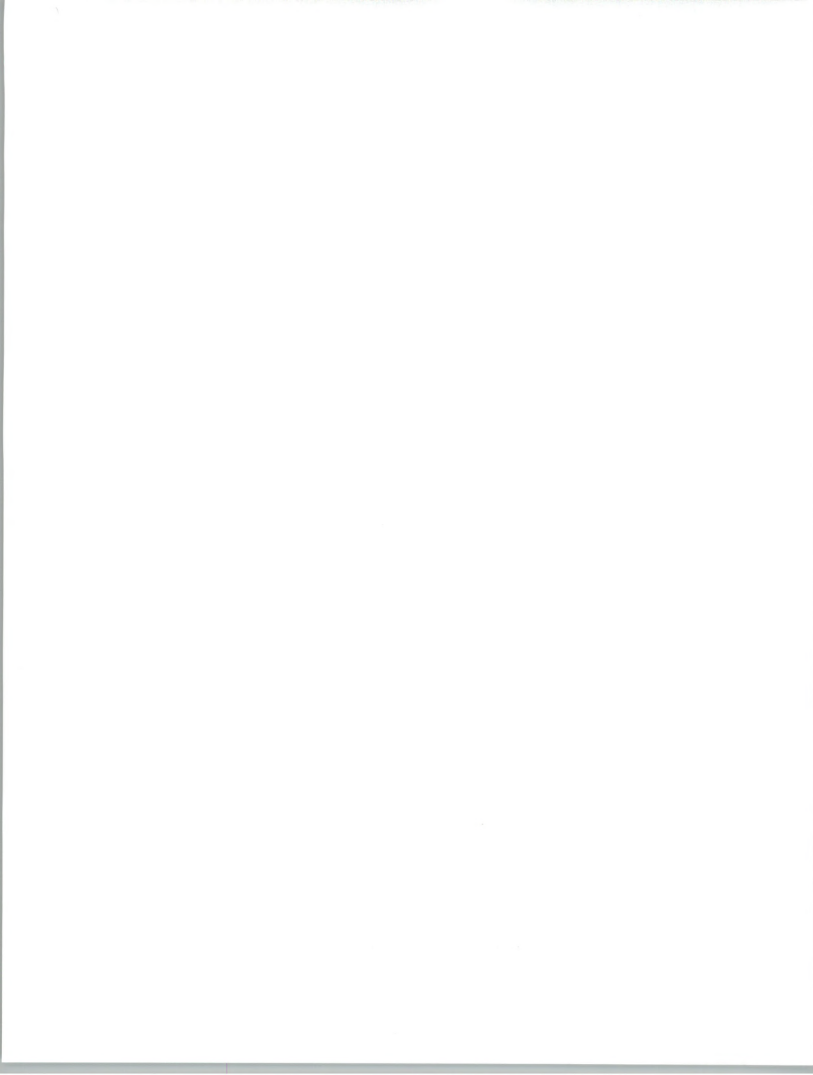
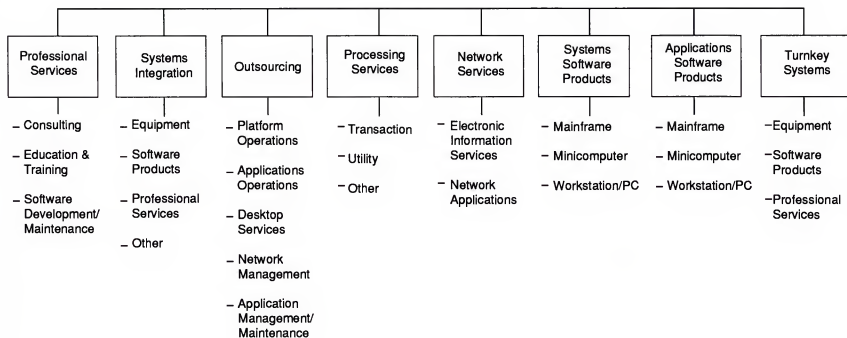


Exhibit 1

Information Services Industry Structure—1994



Source: INPUT

Exhibit 2 lists the industry-specific sectors and cross-industry applications covered by the Market Analysis Program. The publication, INPUT's *Definition of Terms* (included in this binder), provides a complete description of INPUT's market structure and definitions, including Department of Commerce SIC Codes at the two-digit level.

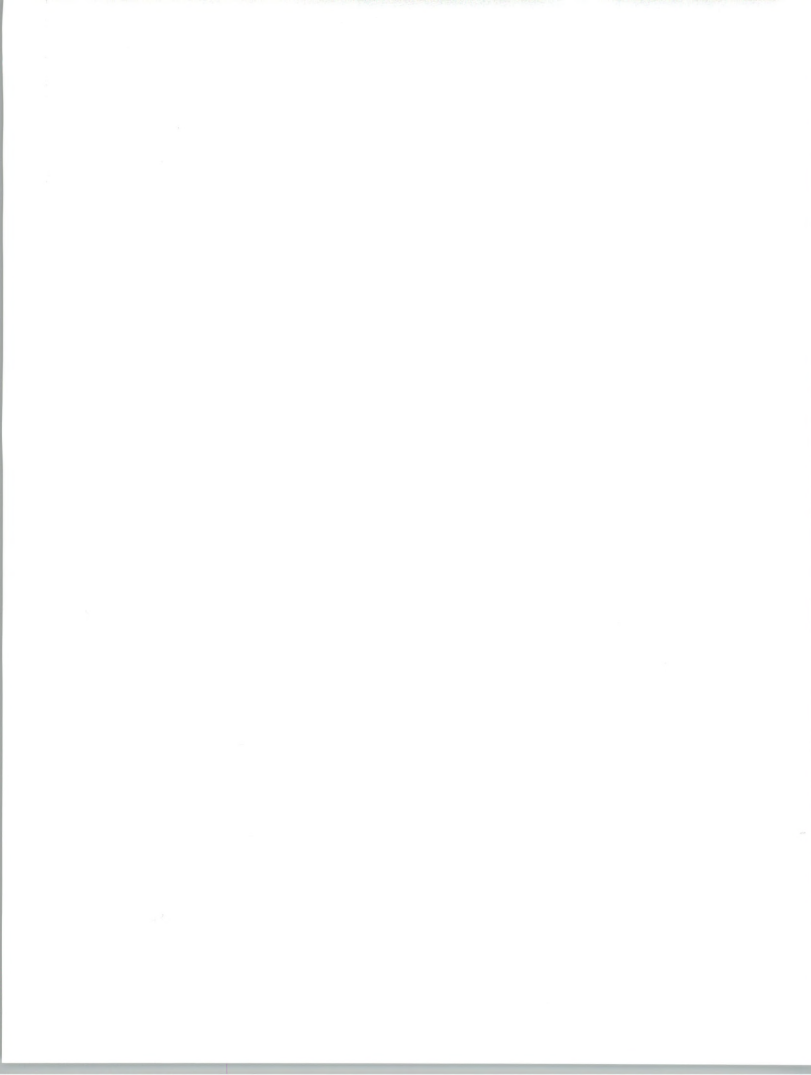
Exhibit 2

Information Services Industry Market Sectors

Industry-Specific Sectors	Cross-Industry Sectors
Discrete Manufacturing	Accounting
Process Manufacturing	Education and Training
Transportation	Engineering and Scientific
Utilities	Human Resources
Telecommunications	Office Systems
Wholesale Trade	Planning and Analysis
Retail Trade	Other (Sales and Marketing)
Banking and Finance	
Insurance	
Health Services (Medical)	
Education	
Business Services	
Federal Government	
State and Local Government	
Miscellaneous Industries	
• Agriculture	
• Construction	

The objective of the MAP reports is to provide vendors in the information services industry with the insights necessary to:

- Identify emerging market opportunities
- Focus on high-growth areas



- Understand competition in specific markets
- Assist in the allocation of resources for marketing and research and development

The reports typically contain:

- Introduction and environment executive overview
- Market forecasts
- Industry structure, vendor market shares, profiles and activities of leading vendors
- Detail on information systems objectives, trends and issues (industry-specific reports only)
- Competitive assessment and leading vendor miniprofiles
- Conclusions and opportunities for vendors

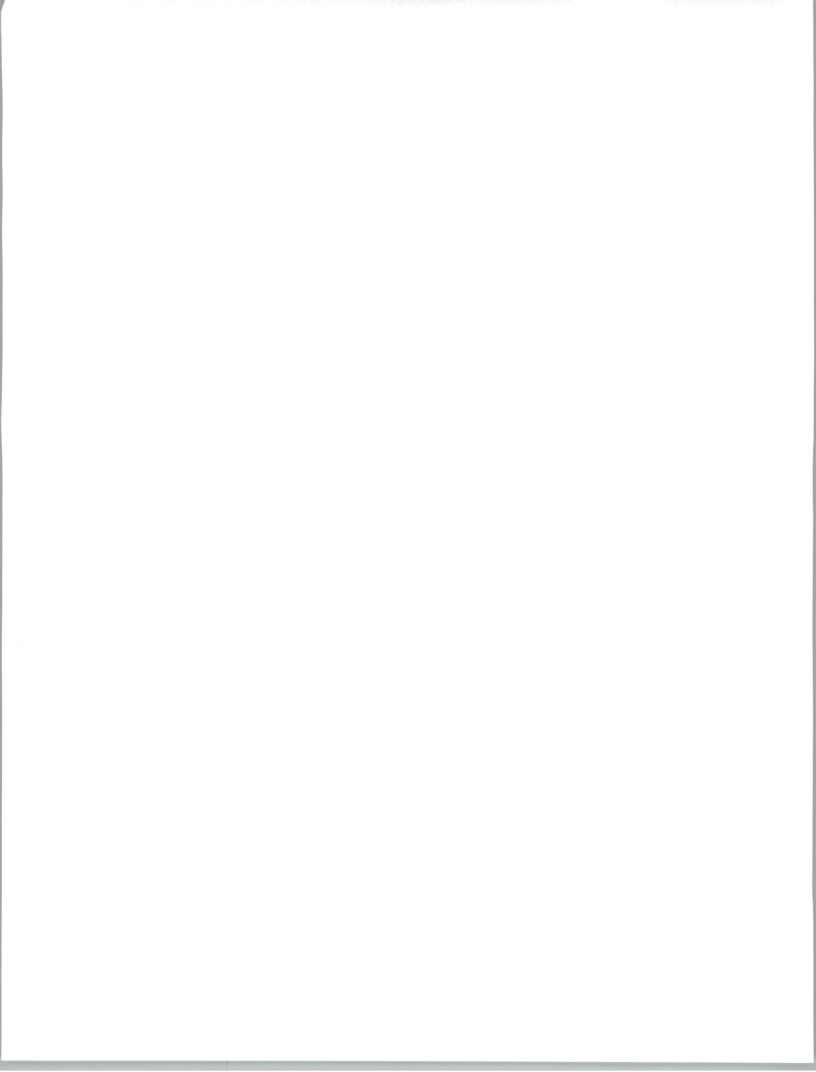
B

Program Content

1. Deliverables

The 1994 Market Analysis Program consists of the following:

- *Program Introduction*—description of the U.S. Information Services Market Analysis Program
- *Definition of Terms*—detailed descriptions of how INPUT defines the information services industry
- Market Reports (Product/Service Market)
 - *U.S. Processing Services Market, 1994-1999*
 - *U.S. Network Services Market, 1994-1999*
 - *U.S. Systems Software Products Market, 1994-1999*



- *U.S. Applications Solutions, 1994-1999*

- *Applications Software Products*
- *Turnkey Systems*

- *U.S. Equipment Services Market, 1994-1999*

Note: Forecast falls outside of INPUT'S information services structure as shown in Exhibit 1.

- Individual, market-sector forecast reports on 15 industry sectors plus a single-volume report on seven cross-industry sectors

(Note: Detailed market forecasts for professional services and systems integration markets are produced in the business integration program. The outsourcing market forecast is produced in the outsourcing program, but all forecast data in these sectors is included in the MAP Forecast Compendium.)

- Four strategic perspective reports on topics of current interest
- *Market Forecast Compendium*—a summary of the 1994-1999 market forecast tables, for all eight product/services markets, and 22 industry/cross industry sectors
- Research bulletins—published twice monthly, research bulletins provide synopses of research in process and analysis of current industry events
- Annual client conference (held in September-2 seats)
- Hot-line consultant access service (40 hours)
- On-site annual presentation

2. Report Structure Format

The various deliverables of the U.S. Information Services Market Analysis Program will be provided as follows:

- **Product/Services Market Reports**—These reports are individually bound and published throughout the year. The content of the market reports is as outlined in Exhibit 3.

- **Program Binders**—These binders contain the *Program Introduction, Definitions of Terms, Market Forecast Compendium* and tabs for all industry sector (vertical market) reports.
- **Industry Sector Report**—The 15 industry sector reports will be published individually throughout the year. The program binder contains tabs for each report. The content of each industry sector report will follow the outline in Exhibit 4.
- **Cross-Industry Reports Binder**—The seven cross-industry reports will be published in a midyear, single bound report. The program binder contains tabs for each report. The contents are outlined in Exhibit 5.

Exhibit 3

Market Report Format Product/Service Markets

- I. Overview**
 - A. Purpose and Methodology
 - B. General Business Trends
- II. Executive Overview**
- III. Information Systems Environment**
 - A. Needs Influencing Use of IS
 - B. Technology
 - C. Key Issues and Trends
 - 1. Driving Forces
 - 2. Inhibiting Forces
- IV. Market Forecast**
 - A. Market Overview and Structure
 - B. Forecast by Submode
 - C. Analysis
- V. Competitive Analysis**
 - A. Major Players
 - B. Competitive Positioning
 - C. Opinion
- VI. Conclusions and Recommendations**
- Appendix**
 - A - Forecast and Reconciliation**
 - B - Methodology**

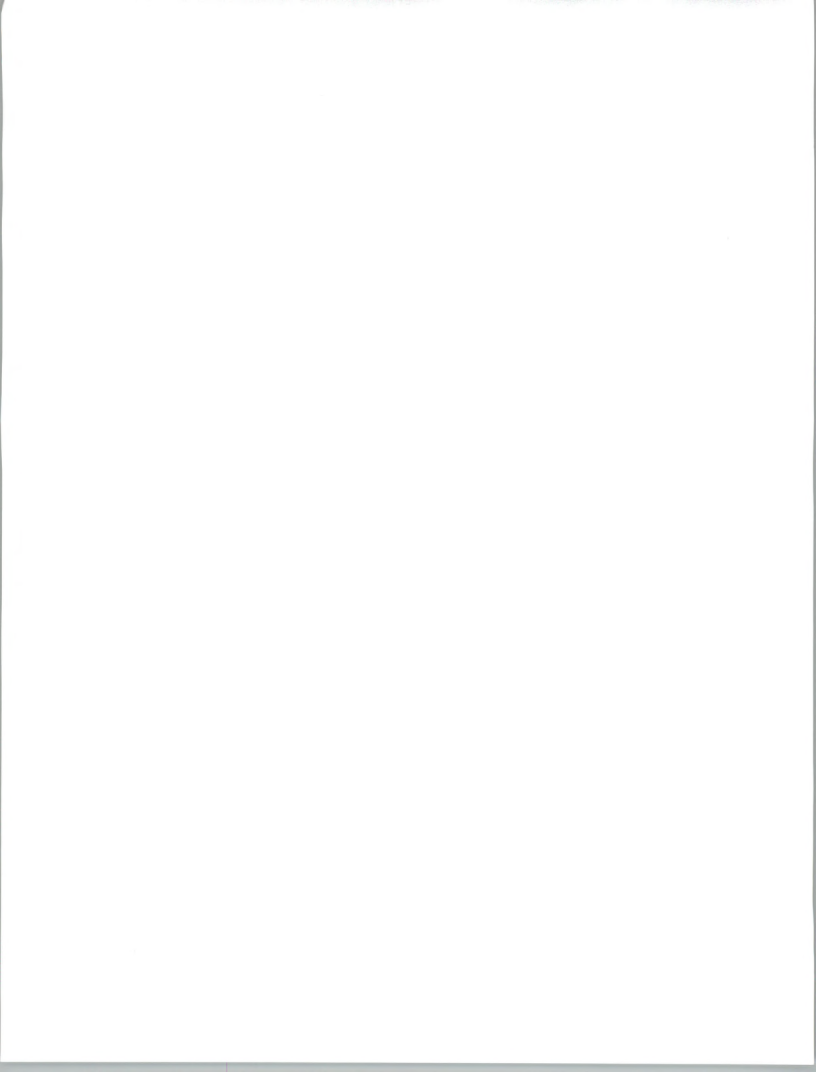


Exhibit 4

1994 Industry Sector Report

- I. Introduction**
 - A. Report Purpose, Contents and Organization
 - B. Related Reports
 - C. Executive Overview
- II. Trends, Events and Issues**
 - A. General Business Trends and Events
 - B. Specific Industry Trends, Events and Issues
- III. Information Systems Environment**
 - A. Global IS Issues
 - B. IS Applications Environment
 - C. IS Response to Environmental Forces
 - D. Impact of New Technologies
 - E. Organization and Budget (if possible)
 - F. IS Department Objectives (if possible)
- IV. Market Forecast**
 - A. Market Overview
 - B. Forecast by Delivery Mode
 - C. Analysis
- V. Competitive Environment**
 - A. Competitive Climate
 - B. Competitive Positioning
 - C. Selected Vendor Profiles
- VI. User Buying Patterns (Optional)**
 - A. Near-Term Application Plans
 - B. Long-Range Application Plans
- VII. Conclusions and Recommendations**
 - A. Industry and Information Services Market Conclusion
 - B. User Issues and Recommendations
 - C. Information Services Vendor Issues and Recommendations
- Appendix A Forecast and Reconciliation**
 - A. Forecast Database
 - B. Forecast Reconciliation
- Appendix B Industry Structure, Methodology and Related Reports**
 - A. Industry Structure
 - B. Research Methodology

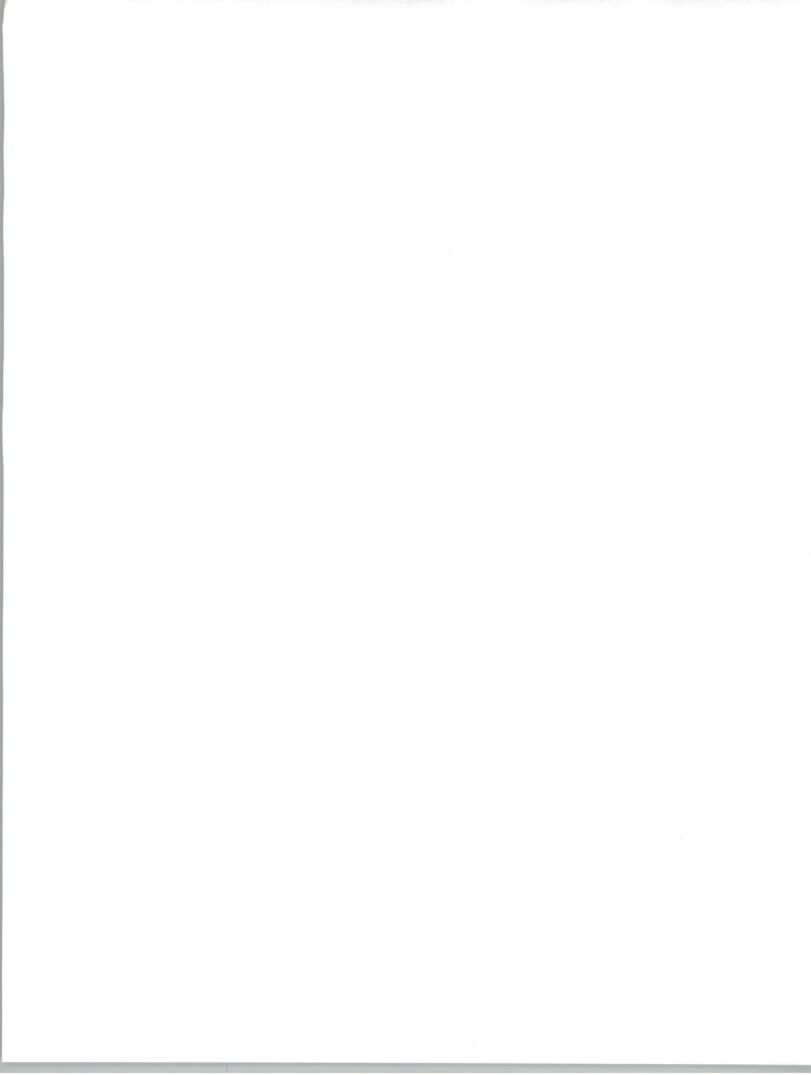


Exhibit 5

Cross-Industry Markets

- I. **Purpose, Scope and Methodology**
 - A. Purpose
 - B. Sector Definition
 - C. Key Issues
 - D. Organization
 - E. Methodology
- II. **Trends, Events and Issues**
- III. **Information Services Market Forecast**
 - A. Applications Software Products
 - B. Turnkey Systems
 - C. Processing Services
- IV. **Appendix A - Forecast Database and Reconciliation**

3. Schedule

Exhibit 6 provides the general delivery schedule for the 1994 MAP reports and conference.

Exhibit 6

Market Analysis Program Delivery Schedule, 1994

Deliverable	Schedule
• Definition of Terms	2nd Quarter
• Product/Service Market Reports	Ongoing
• Industry Sector Reports	Ongoing
• Cross-Industry Reports	3rd Quarter
• Research Bulletins	Twice Monthly
• Client Conference	September
• Market Forecast Compendium	3rd Quarter



C**Research Methodology**

INPUT's methodology for market analysis and forecasting is summarized in Exhibit 7. As in past years, INPUT continues the process of: surveying information services vendors to determine their U.S. information services revenues; surveying information systems organizations to determine their expenditures and outside services acquisition plans; and interviewing selected vendors a second time in greater detail to understand their views of specific market opportunities and technology developments.

INPUT's annual forecasting process is broken into two major parts: base-year expenditure calculations and market forecasts. Each is briefly described in Exhibit 7.

1. Base-Year Expenditure Calculations

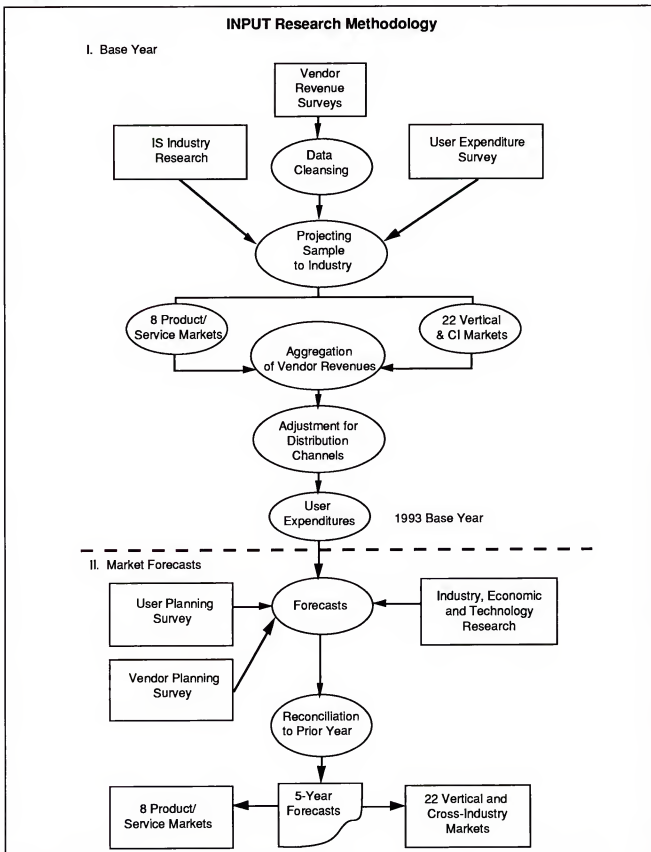
- INPUT determines previous-year information services revenues for the eight product/service markets and 22 vertical and cross-industry sectors, for hundreds of vendors. This is accomplished through interviews, use of public data and INPUT estimates.
- The initial data is projected to represent the entire information services market.
- Adjustments are made to eliminate duplications due to distribution channel overlap and assure captive information services expenditures are not included.
- The end result is a base-year (in this case, 1993) user expenditure figure for each of the 30 markets described above.

2. Market Forecasts

- In the forecasting step, INPUT surveys more than 2,000 information systems executives and functional managers to determine their projected expenditure levels, in aggregate, for each of the eight outside information services categories.



Exhibit 7





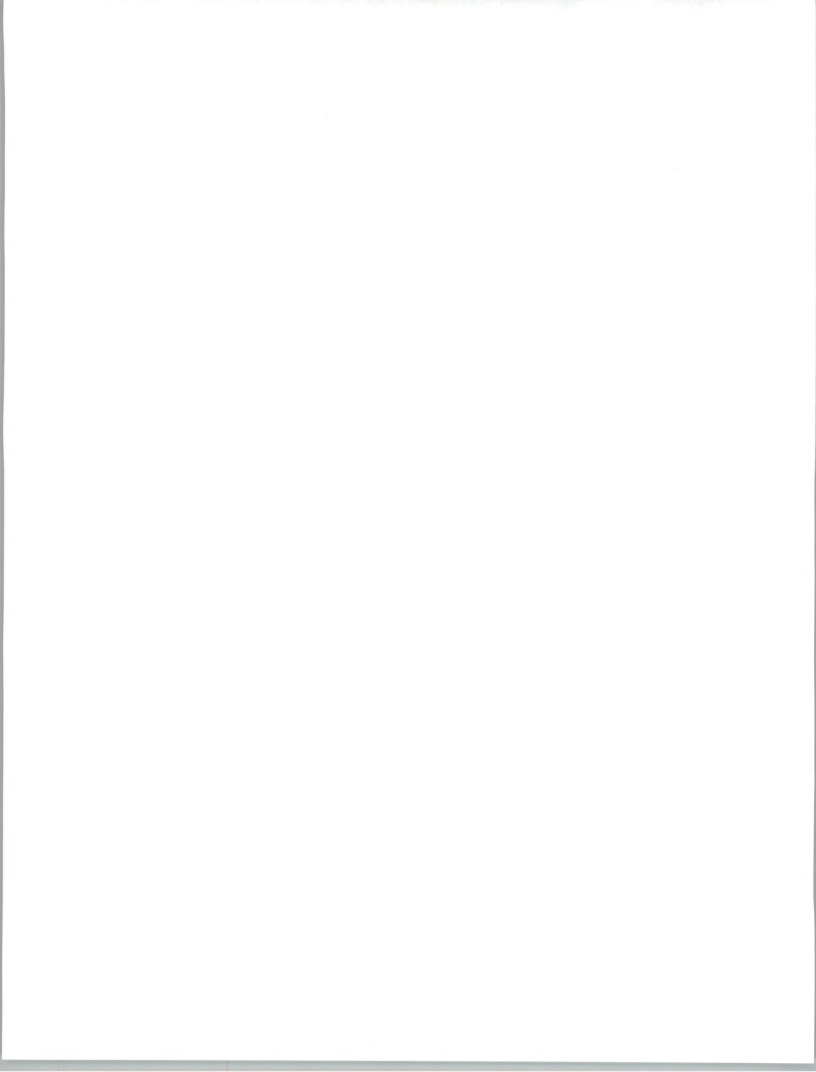
- The end result is a five-year forecast for each of the 15 industry, seven cross-industry and eight product/service markets.
- U.S. revenues—only revenues derived from products or services sold in the U.S are included.
- Noncaptive revenues—only revenues available to all vendors in a competitive marketplace are included. Revenues derived from sales to the partners of affiliated organizations are excluded. An example would be the sale of processing services from Litton Computer Services to another Litton division.
- Calendar-year revenues—approximately 30% of the vendors surveyed have fiscal years that do not coincide with calendar years. Revenues of these companies have been adjusted to a calendar-year basis for consistency.

D

Vendor Revenue and User Expenditure Conversion

The size of the information services market may be viewed from two perspectives: vendor (producer) revenues and user expenditures. While the primary data for INPUT's research is vendor interviews, INPUT defines and forecasts the information services market in terms of user expenditures. User expenditures reflect the markup in producer sales when a product, such as software, is delivered through indirect distribution channels, such as original equipment manufacturers (OEMs), retailers and distributors. The focus on user expenditures also eliminates the double counting of revenues that would occur if sales were tabulated for both producer (e.g., Lotus) and distributor (e.g., BusinessLand).

For most product/service markets, vendor revenues and user expenditures are fairly close. However, there are some areas of significant difference. Many microcomputer software products, for example, are marketed through indirect distribution channels. To capture the value added through these indirect distribution channels, adjustment factors that incorporate industry discount ratios are used to convert estimated information services vendor revenues to user expenditures.



For some sectors, including software products, systems integration and turnkey systems, there is a significant volume of intra-industry sales. For example, systems integrators purchase software and subcontract the services of other professional services vendors. Whereas, turnkey vendors incorporate purchased equipment into the systems they sell to users.

To account for such intra-industry transactions, INPUT uses other conversion ratios to derive the estimate of user expenditures.

Exhibit 8 summarizes the net effect of the various ratios used by INPUT to convert vendor revenues to user expenditure (market size) figures for each sector.

Exhibit 8

Vendor Revenue to User Expenditure Conversion

Product/Service Sector	Vendor Revenue Multiplier
Professional Services	0.99
Systems Integration	0.95
Outsourcing	0.95
Processing Services	0.99
Network Services	0.99
Systems Software Products	1.10
Applications Software Products	1.18
Turnkey Systems	0.95

E

Economic Assumptions

Forecasts are presented in current dollars (i.e., 1998 market sizes are in 1998 dollars, thus incurring inflationary effects). In developing its five-year forecasts, INPUT has incorporated current economic assumptions regarding the outlook for the U.S. economy as a whole.

The GDP and GDP Deflator growth rates, used by INPUT's market projections, are from the CONSENSUS™ forecast of the Blue Chip Economic Indicators of Sedona, Arizona. The Blue Chip CONSENSUS forecast is derived from a panel of economists representing leading financial, industrial and research firms across the U.S., and has a 13-year track record of balanced and accurate projections.

The current blue-chip assumptions are shown in Exhibit 9.

Exhibit 9

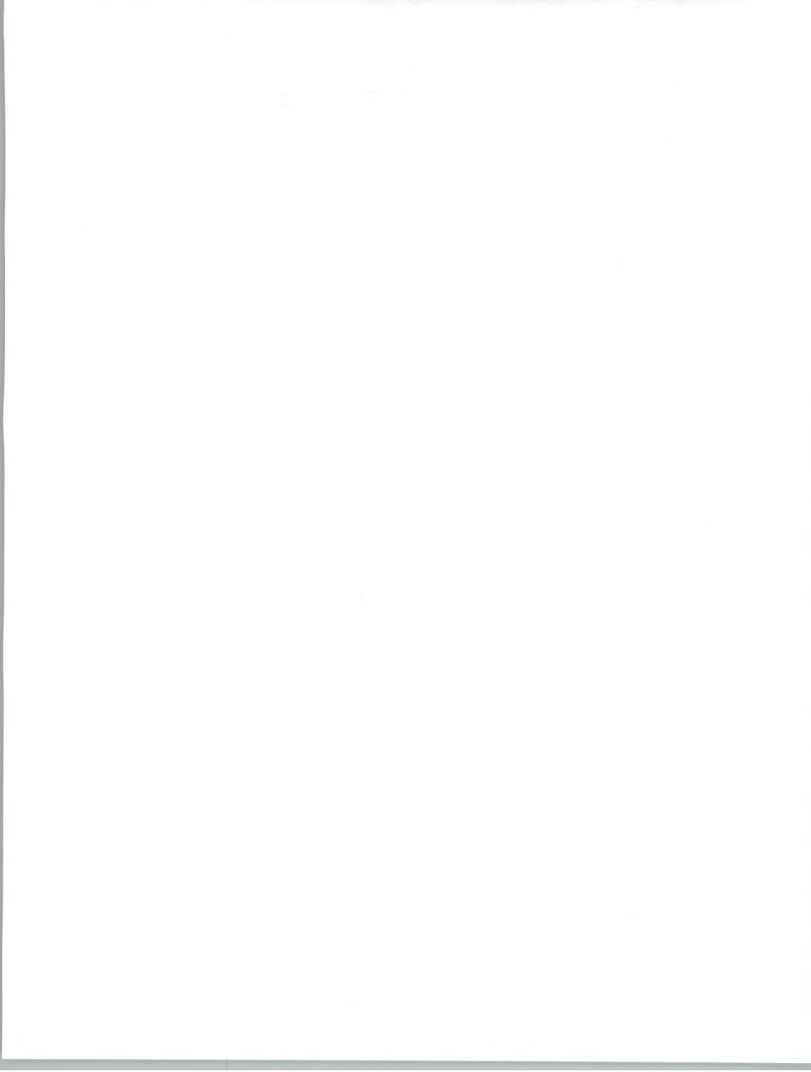
GDP and Inflation Growth Rate Assumptions 1994-2000

1994 Assumptions Based upon the March *Blue Chip Consensus* Report

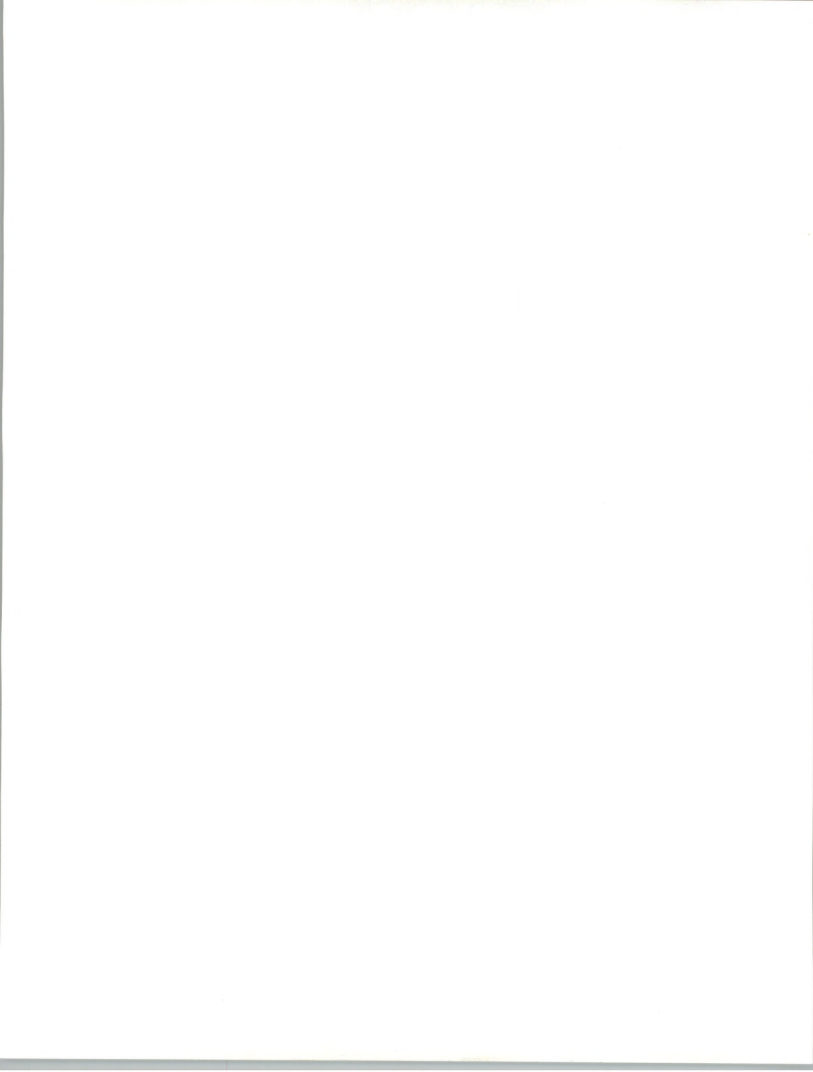
Overall	1994	1995	1996	1997	1998	1999	2000	Average 1996-2000
Total GDP (1)	6.0	5.7	5.8	5.7	5.6	6.1	5.7	5.8
GDP Deflator	2.3	2.9	3.2	3.2	3.1	3.1	3.0	3.1
Real GDP (2)	3.6	2.8	2.6	2.5	2.4	2.8	2.6	2.6

Notes:

- (1) Totals of GDP Deflator and Real GDP may not add due to rounding.
Current dollars.
- (2) Constant 1987 dollars.







INPUT®

INTERNATIONAL IT INTELLIGENCE SERVICES

Clients make informed decisions more quickly and economically by using INPUT's services. Since 1974, information technology (IT) users and vendors throughout the world have relied on INPUT for data, research, objective analysis and insightful opinions to prepare their plans, market assessments and business directions, particularly in computer software and services.

Contact us today to learn how your company can use INPUT's knowledge and experience to grow and profit in the revolutionary IT world of the 1990s.

SUBSCRIPTION SERVICES

- Information Services Markets
 - Worldwide and country data
 - Vertical industry analysis
- Business Integration Markets
- Client/Server Applications and Directions
- Client/Server Software
- Outsourcing Markets
- Information Services Vendor Profiles and Analysis
- EDI/Electronic Commerce
- U.S. Federal Government IT Markets
- IT Customer Services Directions (Europe)

SERVICE FEATURES

- Research-based reports on trends, etc. (Over 100 in-depth reports a year)
- Frequent bulletins on events, issues, etc.
- 5-year market forecasts
- Competitive analysis
- Access to experienced consultants
- Immediate answers to questions
- On-site presentations
- Annual conference

DATABASES

- Software and Services Market Forecasts
- Software and Services Vendors
- U.S. Federal Government
 - Procurement Plans (PAR)
 - Forecasts
 - Awards (FAIT)
- Commercial Application (LEADS)

CUSTOM PROJECTS

For Vendors—analyze:

- Market strategies and tactics
- Product/service opportunities
- Customer satisfaction levels
- Competitive positioning
- Acquisition targets

For Buyers—evaluate:

- Specific vendor capabilities
- Outsourcing options
- Systems plans
- Peer position

OTHER SERVICES

Acquisition/partnership searches

INPUT WORLDWIDE

Frankfurt

Sudetenstraße 9
D-35428 Langgöns-
Niederkleen
Germany
Tel. +49 (0) 6447-7229
Fax +49 (0) 6447-7327

London

17 Hill Street
London W1X 7FB
England
Tel. +44 (0) 71 493-9335
Fax +44 (0) 71 629-0179

New York

400 Frank W. Burr Blvd.
Teaneck, NJ 07666
U.S.A.
Tel. 1 (201) 801-0050
Fax 1 (201) 801-0441

Paris

24, avenue du Recteur
Poincaré
75016 Paris
France
Tel. +33 (1) 46 47 65 65
Fax +33 (1) 46 47 69 50

San Francisco

1881 Landings Drive
Mountain View
CA 94043-0848
U.S.A.
Tel. 1 (415) 961-3300
Fax 1 (415) 961-3966

Tokyo

Saida Building, 4-6,
Kanda Sakuma-cho
Chiyoda-ku, Tokyo 101
Japan
Tel. +81 3 3864-0531
Fax +81 3 3864-4114

Washington, D.C.

1953 Gallows Road
Suite 560
Vienna, VA 22182
U.S.A.
Tel. 1 (703) 847-6870
Fax 1 (703) 847-6872

